

REMARKS

In the Office Action mailed June 6, 2003, the Examiner noted that claims 1-39 were pending, allowed claims 16-20, 22-27, 35 and 36, objected to claims 4-15, 21 and 28-34 and rejected claims 1-3 and 37-39. Claims 4, 6, 8, 10, 11, 12, 14, and 28-34 have been amended, new claim 40 has been added and, thus, in view of the forgoing claims 1-3 and 37-40 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejection is traversed below.

In the Office Action the Examiner objected to claims 4-15, 21 and 28-34 and indicated that these claims would be allowable if rewritten in independent form. Claims 4-15 and 28-34 have been so rewritten and it is submitted that these claims are now allowable. Withdrawal of the objection is requested.

Claim 21 has been amended to be dependent from allowed claim 16 and is allowable.

Page 2 of the Office Action rejects claims 1-3 and 37-39 under 35 U.S.C. § 103 over Surface Deformation Using a Glove (hereinafter "Sensor Glove").

In making the above-identified rejection, the Examiner acknowledges that Sensor Glove does not use a flexible tape as in the present invention. The Examiner did not cite a reference for this invention feature and nevertheless indicated that such would have been obvious. The Examiner is apparently basing the rejection on the personal knowledge of the Examiner. The personal knowledge of the Examiner when used as a basis for a rejection "must be supported" by an affidavit as to the specifics of the facts of that knowledge when called for by applicant. See, e.g. 37 C.F.R. 1.104(d)(2). In short, the rules of the U.S. Patent and Trademark Office do not allow discretion on the part of the Examiner. Either the Examiner must support this assertion with an Affidavit or withdraw the rejection. The Examiner is requested to support the rejection with either an affidavit or a reference, or withdraw the rejection. For this reason, it is requested that the rejection be withdrawn.

To support a finding of obviousness based on a single reference, the single reference must suggest the desirability of modifying its disclosure as needed to accomplish the invention (see In re Gordon, 733 F2d 900, 221 USPQ 1125, (Fed Cir 1984); Schreck v. Morton, 713 F2d 782, 218 USPQ 699 (Fir Cir 1983) and Cooper v. Ford, 748 F2d 677, 223 USPQ 1286 (Fed.Cir. 1984)). There is no suggestion in Sensor Glove that it would be desirable or even possible to modify the Sensor Glove to handle or work with a flexible tape to produce a curve. For this

additional reason, it is requested that the rejection be withdrawn.

The Examiner argues "the idea of creating curves by using flexible material like a tape or glove **means** it could be anything that is flexible and looks like a curve" (**bold** emphasis supplied). By using the invention disclosure of a flexible tape to justify an alleged equivalence to anything that is flexible is engaging in hindsight. Hindsight cannot be used in determining the issue of obviousness and the reviewer must view the prior art without reading into that art the teachings of the application or patent (see Kalman v. Kimberly Clark Corp., 713 F.2d 760,218 U.S.P.Q. 781(Fed.Cir.1983)). For this further reason, it is requested that the rejection be withdrawn.

The present invention involves creating a "curve". Sensor Glove teaches away from the present invention, contrary to the Examiners allegation of a broad teaching by Sensor Glove. As noted in the Conclusion on page 194, "The work presented in this paper only concerns about how to deform an object surface." That is, original curve formation is explicitly not within the scope of Sensor Glove. For this reason, it is requested that the rejection be withdrawn.

Even if the Examiners use of personal knowledge, rejection without a motivation and use of hindsight are proper in the face of the reference teaching away from the invention, the present invention distinguishes over the prior art for the following reasons.

Sensor Glove is directed to system that allows a user to modify or mold the shape of an object with their hand. Sensor Glove even calls what is formed by the glove a "hand surface" (see page 189, col. 2, lines 10-13). A person's hand can form essentially a straight line or a C-shaped curve. As a result, curves that require more complex shapes must be done in stages by molding. The present invention uses a "flexible tape" (see claims 1-3 and 37-39), not a glove and not a hand surface, where the flexible tape allows a complex curve, such as an S-shaped curve, to be formed in essentially a single operation (see application figure 11A). The complexity of the shapes of curves that can be formed essentially in a single operation with a flexible tape can be seen by looking at the drawings of the present application (see application figures 6 - loop, 10 - m, 12A - std. deviation, 13C - drop like). Sensor Glove does not provide this capability because Sensor Glove discloses nothing about a flexible tape.

In addition as noted above, the present invention produces a "curve" (see claims 1-3 and 37-39). Sensor Glove does not. Sensor Glove teaches surface deformation. The ability to produce curves is more powerful and more fundamental than deforming a surface.

It is submitted that the invention of claims 1-3 and 37-39 distinguishes over the prior art and withdrawal of the rejection is requested.

New claim 40 emphasizes that the flexible tape is manipulated with two hands to produce a curve. Sensor Glove says nothing about two handed control. Nothing in the prior art teaches or suggests such. It is submitted that the new claim distinguishes over the prior art.

It is also submitted that claims 4-36 continue to be allowed/allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 10/13/3

By: 
J. Randall Beckers
Registration No. 30,358

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501